

VEINAL NECROSIS OF FITTONIA CAUSED BY A PATHOVAR OF XANTHOMONAS CAMPESTRIS

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Fittonia verschaffeltii (Lem.) Coem., the nerve plant, is commonly grown for dish gardens, terrariums, and hanging baskets (1). It is a member of the family Acanthaceae, in which many other important ornamental species are found. Recently, a foliar disease of all cultivars of nerve plant was observed in several central Florida nurseries (1). A pathovar of Xanthomonas campestris (Pammel) Dawson was consistently associated with this disease and proven to be the cause (1).

SYMPTOMS. Veinal necrosis (Fig. 1) of fully expanded leaves, marginal necrosis, and watersoaking are typical symptoms of this disease. Lesions become dry and brittle when the foliage is allowed to dry. Small, tan circular lesions that appear to be a hypersensitive response are also observed. The bacterium causing this disease also produces symptoms when experimentally inoculated on other members of the Acanthaceae, including Aphelandra squarrosa Nees (zebra plant), Crossandra infundibuliformis (L.) Nees (firecracker flower), Stenandrium lindenii N. E. Br. (golden vein plant), and Xantheranthemum igneum (Linden) Lindau (bronze vein plant). Susceptible hosts from other plant families (determined by inoculation) include Pelargonium x hortorum L. H. Bailey (bedding geranium), Codiaeum variegatum (L.) Blume (croton), Pilea spruceana Wedd. (friendship pilea), and Strelitzia reginae Ait. (bird of paradise), among others (1).



Fig. 1. Xanthomonas campestris on Fittonia verschaffeltii showing veinal necrosis on upper surface.

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CONTROL. Control should begin with sanitation and proper horticultural practices to avoid spread of the pathogen. Many of the plants found susceptible to this pathogen are grown side-by-side and under ideal conditions for pathogen spread and development. In general, nurseries that kept foliar surface moisture as low as possible had lower levels of disease than those in which the foliage stayed wet (1). No chemicals are labelled for control of this disease.

SURVEY AND DETECTION. Look for veinal and marginal necrosis, with or without watersoaking. The symptoms may resemble cold damage, fertilizer burn, phytotoxicity, or other types of injury.

LITERATURE CITED

1. Blake, J. H., A. R. Chase, and C. W. Simone. 1989. A foliar disease of Fittonia verschaffeltii caused by a pathovar of Xanthomonas campestris. Plant Disease 73:269-272.

Contribution No. 645, Bureau of Plant Pathology

<p>This publication was issued at a cost of \$1052.32 or \$ 0.24 per copy to provide information on proper recognition of plant pests. PI89T-45</p>
